July 28, 1987

See Correction letter of 9/16/87

Docket Nos. 50-250
and 50-251

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Mr. C. O. Woody, Group Vice President
Nuclear Energy Department
Florida Power and Light Company
Post Office Box 14000
Juno Beach, Florida 33408

Dear Mr. Woody:

The Commission has issued the enclosed Amendment No. 125 to Facility Operating License No. DPR-31 and Amendment No. 119 to Facility Operating License No. DPR-41 for the Turkey Point Plant, Units Nos. 3 and 4, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated July 18, 1986, as supplemented on February 20, 1987.

These amendments incorporate plant specific Technical Specifications for the Reactor Vessel Level Monitoring System (RVLMS). The RVLMS has been installed and tested on Turkey Point Units 3 and 4, and is a portion of the Inadequate Core Cooling System (ICCS). The NRC staff reviewed and approved the ICCS for Turkey Point Units 3 and 4. The details and basis for the approval are documented in the staff's Safety Evaluation dated January 28, 1985. The RVLMS portion of the ICCS was approved for implementation prior to the licensee requesting Technical Specifications for the RVLMS. The Technical Specifications are in accordance with the NUREG-0737, Item II.F.2, and the staff's Safety Evaluation referenced above.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular bi-weekly Federal Register notice.

Sincerely,
/s/

Daniel G. McDonald, Jr., Project Manager
Project Directorate II-2
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 125 to DPR-31
2. Amendment No. 119 to DPR-41
3. Safety Evaluation

cc: w/enclosures
See next page

No Correction Letter

LA:PDR2	PM:PD22	D:PD22	OGC
DMiller	DMcDonald:bg	LRubenstein	
4/30/87	5/1/87	7/27/87	5/1/87

5/7/87

OTS RJE 7/27/87

Mr. C. O. Woody
Florida Power and Light Company

Turkey Point Plant

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

TURKEY POINT PLANT UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 125
License No. DPR-31

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Florida Power and Light Company (the licensee) dated July 18, 1986, as supplemented on February 20, 1987, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-31 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 125 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Lester S. Rubenstein, Director
Project Directorate II-2
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 28, 1987

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-251

TURKEY POINT PLANT UNIT NO. 4

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 119
License No. DPR-41

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Florida Power and Light Company (the licensee) dated July 18, 1986, as supplemented on February 20, 1987, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-41 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 119, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Lester S. Rubenstein, Director
Project Directorate II-2
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical Specifications

Date of Issuance: July 28, 1987

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 125 FACILITY OPERATING LICENSE NO. DPR-31

AMENDMENT NO. 119 FACILITY OPERATING LICENSE NO. DPR-41

DOCKET NOS. 50-250 AND 50-251

Revise Appendix A as follows:

Remove Pages	Insert Pages
Table 3.5-5	Table 3.5-5
Table 3.5-5 Action Statements (1 Page)	Table 3.5-5 Action Statements (2 pages)
Table 4.1-1 Sheet 4	Table 4.1-1 Sheet 4
Page 6-19	Page 6-19
B3.5-1	B3.5-1

TABLE 3.5-5

ACCIDENT MONITORING INSTRUMENTATION

	INSTRUMENTATION	TOTAL NO. OF CHANNELS	MINIMUM CHANNELS OPERABLE	APPLICABLE ACTIONS
1.	Pressurizer Water Level	2	1	1,2
2.	Auxiliary Feedwater Flow Rate	2 per generator	1 per generator	1,2
3.	Reactor Coolant System Subcooling Margin Monitor	2	1	1,2
4.	PORV Position Indicator (Primary Detector)	1/valve	1/valve	4
5.	PORV Block Valve Position Indicator	1/valve	1/valve	4
6.	Safety Valve Position Indicator (Primary Detector)	1/valve	1/valve	1,2
7.	Containment Pressure (Wide Range)	2	1	1,2
8.	Containment Pressure (Narrow Range)	2	1	3
9.	Containment Water Level (Wide Range)	2	1	1,2
10.	Containment Water Level (Narrow Range)	2	1	3
11.	Containment High Range Area Radiation	2	1	5
12.	Containment Hydrogen Monitors	2	1	6,7
13.	High Range - Noble Gas Effluent Monitors			
	a. Plant Vent Exhaust	1	1	5
	b. Unit 3 - Spent Fuel Pit Exhaust	1	1	5
	c. Condenser Air Ejectors	1	1	5
	d. Main Steam Lines	1	1	5
14.	Incore Thermocouples (Core Exit Thermocouples)	4/core quadrant	2/core quadrant	1,2
15	Reactor Vessel Level Monitoring System	2 (Note 1)	1 (Note 1)	8,9

Note 1: A channel is eight sensors in a probe. A channel is operable if a minimum of four sensors are operable.

TABLE 3.5-5 (Continued)

ACTION STATEMENTS

ACTION 1 With the number of OPERABLE accident monitoring instrumentation channel(s) less than the Total Number of Channels shown in Table 3.5-5. either restore the inoperable channel(s) to OPERABLE status within 7 days, or be in a condition with $K_{eff} < 0.99$, % thermal power excluding decay heat equal to zero, and an average coolant temperature $T_{avg} < 350^{o}F$ within the next 12 hours.

ACTION 2 With the number of OPERABLE accident monitoring instrumentation channels less than the minimum channels OPERABLE requirements of Table 3.5-5, either restore the inoperable channel(s) to OPERABLE status within 48 hours, or be in a condition with $K_{eff} < 0.99$, % thermal power excluding decay heat equal to zero, and an average coolant temperature $T_{avg} < 350^{o}F$ within the next 12 hours.

ACTION 3 Operation may continue up to 30 days with less than minimum channels OPERABLE for narrow range instruments.

ACTION 4 Or close the associated block valve and open its circuit breaker.

ACTION 5 With the number of OPERABLE Channels less than required by the Minimum Channels OPERABLE requirements, initiate the preplanned alternate method of monitoring the appropriate parameter(s), within 72 hours, and:

1) either restore the inoperable channel(s) to OPERABLE status within 7 days of the event, or

2) prepare and submit a Special Report to the Commission pursuant to Specification 6.9.3 within 30 days following the event outlining the action taken, the cause of the inoperability, and the plans and schedule for restoring the system to OPERABLE status.

ACTION 6 With one hydrogen monitor inoperable, restore the inoperable monitor to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 6 hours.

ACTION 7 With both hydrogen monitors inoperable, restore at least one monitor to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 6 hours.

ACTION 8 With the number of OPERABLE Channels one less than the Total Number of Channels restore the system to OPERABLE status within 7 days. If repairs are not feasible without shutting down, prepare and submit a Special Report to the commission pursuant to the specification 6.9.3(k) within 30 days following the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

TABLE 3.5-5 (Continued)

ACTION STATEMENTS

ACTION 9 With the number of OPERABLE Channels less than the Minimum Channels OPERABLE requirements, restore the inoperable channel(s) to OPERABLE status within 48 hours. If repairs are not feasible without shutting down:

1. Initiate an alternate method of monitoring the reactor vessel inventory; and

2. Prepare and submit a Special Report to the Commission pursuant to Specification 6.9.3(j) within 30 days following the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status; and

3. Restore at least one channel to OPERABLE status at the next scheduled refueling.

l. If the power tilt in Technical Specification 3.2.6.h is not corrected to less than 2% within 24 hours and its design hot channel factors for rated power are not exceeded, a Special Report with an evaluation as to the cause of the discrepancy shall be submitted within 30 days. Reference T.S. 3.2.6.i(1)

m. Following a normalization of the computed boron concentration as a function of burnup, if the difference between the observed and predicted boron concentration reached the equivalent of one percent in reactivity, a Special Report shall be submitted within 30 days. Reference T.S. 4.11

n. Reactor Vessel Level Monitoring System, Reference Table 3.5-5, Action Statements 8 and 9.

TABLE 4.1-1 SHEET 4

	Channel Description	Check	Calibrate	Test	Remarks
34.	Containment Water Level (Narrow Range)	M††	R	N.A.	
35.	Containment Water Level (Wide Range)	M††	R	N.A.	
36.	Containment High Range Area Radiation	S††	R(Note 1)	M††	
37.	Containment Hydrogen Monitors	S†	Q(1)	M†	(1) Channel calibration using sample gas containing: a. One volume percent hydrogen, balance nitrogen. b. Four volume percent hydrogen, balance nitrogen.
38.	High Range Noble Gas Effluent Monitors				
	a. Plant Vent Exhaust	S	R	M	
	b. Unit 3 Spent Fuel Pit Exhaust	S	R	M	
	c. Condenser Air Ejectors	S†	R	M†	
	d. Main Steam Lines	S†	R	M†	
39.	Incore Thermocouples (Core Exit Thermocouples)	M††	R	N.A.(See Note 2)	
40.	Reactor Vessel Level Monitoring System	M††	R	N.A.	

B3.5 BASES FOR LIMITING CONDITIONS FOR OPERATION, INSTRUMENTATION

This specification outlines limiting conditions for operation necessary to preserve the effectiveness of the reactor and safety features instrumentation systems when any one or more of the channels is out of service.

Almost all reactor protection channels are supplied with sufficient redundancy to provide the capability for channel calibration and test at power. Exceptions are backup channels such as reactor coolant pump breakers. The removal of one trip channel is accomplished by placing that channel bistable in a tripped mode; e.g., a two-out-of-three circuit becomes a one-out-of-two circuit. Testing does not trip the system unless a trip condition exists in a concurrent channel.

Reactor Vessel Level Monitoring System

In the event more than four sensors in a Reactor Vessel Level channel are inoperable, repairs may only be possible during the next refueling outage. This is because the sensors are accessible only after the missile shield and reactor vessel head are removed. If only one channel is inoperable, it should be restored to OPERABLE status in a refueling outage as soon as reasonably possible. If both channels are inoperable, at least one channel shall be restored to OPERABLE status in the nearest refueling outage.

Reference:
FSAR - Section 7.2.1

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 125 TO FACILITY OPERATING LICENSE NO. DPR-31

AND AMENDMENT NO. 119 TO FACILITY OPERATING LICENSE NO. DPR-41

FLORIDA POWER AND LIGHT COMPANY

TURKEY POINT UNIT NOS. 3 AND 4

DOCKET NOS. 50-250 AND 50-251

I. BACKGROUND

By letter dated July 18, 1986, as supplemented on February 20, 1987, Florida Power and Light Company (the licensee) requested changes to the Technical Specifications for the Turkey Point Plant, Units 3 and 4. The proposed amendments would incorporate plant specific Technical Specifications for the Reactor Vessel Level Monitoring System (RVLMS). The RVLMS has been installed and tested on Turkey Point Units 3 and 4, and is a portion of the Inadequate Core Cooling System (ICCS). The NRC staff reviewed and approved the ICCS for Turkey Point Units 3 and 4. The details and basis for the approval are documented in the staff's Safety Evaluation dated January 28, 1985. The RVLMS portion of the ICCS was approved for implementation prior to the licensee requesting Technical Specifications for the RVLMS. The Technical Specifications are proposed to comply with the NUREG-0737, Item II.F.2, and the staff's Safety Evaluation referenced above. The proposal is also based on the Technical Specifications approved by the NRC for the Palo Verde Nuclear Generating Station Unit 1.

The RVLMS is neither given credit nor is required in the evaluated accidents for the Turkey Point Plant, and is not relied upon for reactor trip or initiation of any plant safety systems. It is intended solely to enhance the operator's ability to understand and manage transients and events by providing additional corroborative information.

II. DISCUSSION

The criteria for determining if a channel is operable is based on the quality of information which can tell an operator whether he has a void forming and the extent of the void. A channel of level measurement consists of eight heated junction thermocouples. Two are located in the reactor head and six are in the upper plenum region. The staff has determined that if half of these sensors are functioning, the operator can determine if a void has formed, if it is growing or if the corrective action is succeeding in reducing the void. The Palo Verde Technical Specifications, upon which this submittal is patterned, require that as a minimum, four out of eight sensors must be functioning to declare a channel operational. A minimum of one channel must be operational to declare the system operational. These requirements are considered adequate to track the course of an accident.

III. EVALUATION

The staff originally took the position that the licensee's submittal dated July 18, 1986, was satisfactory in all respects with the exception of Action Statement 9. As stated this Action Statement would have allowed restart after a scheduled refueling outage with one of the two channels failed. This would force operation for a complete fuel cycle with the imposition of Action Statement 8 (operation with one failed channel). Although operation in this condition is feasible, it was not considered prudent to encourage restart with known defective equipment. In response to our concern, the licensee's submittal dated February 20, 1987, required restoration of the system (both channels) to operable status prior to restart from a scheduled refueling outage. Subsequent to our position requiring that both channels be operable and the licensee's response to our concern, the Commission has issued a Generic Letter (GL) relating to the applicability of Limiting Conditions of Operations (LCO). GL 87-09 "Sections 3.0 and 4.0 of the Standard Technical Specifications (STS) On the Applicability of Limiting Conditions for Operation and Surveillance Requirements," dated June 4, 1987, addressed LCOs and action requirements. One area addressed is directly applicable to Action Statement 9 discussed above.

One of the technical positions stated in the GL is that facility operation is unduly restricted when startup is delayed under conditions in which conformance to the Action Requirements establishes an acceptable level of safety for unlimited continued operation of the facility.

For an LCO that has Action Requirements permitting continued operation for an unlimited period of time, entry into an operational mode or other specified condition of operation should be permitted in accordance with those Action Requirements. This is consistent with NRC's regulatory requirements for an LCO. The restriction on a change in operational modes or other specified conditions should apply only where the Action Requirements establish a specified time interval in which the LCO must be met or a shutdown of the facility would be required.

As previously stated, the RVLMS is neither given credit nor is required in the evaluated accidents for the Turkey Point Plant, and is not relied upon for reactor trip or initiation of any plant safety systems. It is intended solely to enhance the operator's ability to understand and manage transients and events by providing additional corroborative information. The facility may continue to operate if both channels are lost if an alternate method of monitoring the reactor vessel inventory is initiated and a Special Report is provided to the Commission. Therefore, based on the guidance in the GL, it would be undully restrictive to require both channels be operable prior to startup and the requirement to restore at least one channel, as originally proposed, is acceptable.

We conclude that the proposed Technical Specifications provide reasonable assurance that the RVLMS information will be available to the operator to enhance the operator's ability to understand and manage transients and events when needed.

These proposed amendments were initially noticed in the Federal Register on September 24, 1986 (51 FR 33949) and renoticed on May 6, 1987 (52 FR 16946). The renotice was to identify the February 20, 1987 submittal and the change proposed for Action Statement 9. However, the basis for the determination of significant hazards was unchanged in the renotice. The final determination of the required number of operational channels prior to startup has no impact on the significant hazards determination.

IV. ENVIRONMENTAL CONSIDERATION

These amendments involve changes in the installation or use of the facilities components located within the restricted areas as defined in 10 CFR 20. The staff has determined that these amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

V. CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: July 28, 1987

Principal Contributors:

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